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Notice of Allowability	Application No.	Applicant(s)	
	10/645,063	FRIED ET AL.	
	Examiner	Art Unit	
	Brook Kebede	2823	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 21 August 2003.
2. ☒ The allowed claim(s) is/are 1-6.
3. ☒ The drawings filed on 21 August 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>8/21/03</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to the Preliminary Amendment

1. The preliminary amendment filed under 37 CFR 1.53(b) on August 21, 2003 is acknowledged and the amendment have been placed in the file.

Allowable Subject Matter

2. Claims 1-6 allowed over prior art of record.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

The prior art of record neither anticipates nor renders obvious the claimed subject matter of the instant application as a whole either taken alone or in combination, in particular, prior art of record does not teach "forming a second transistor so that a sidewall of a second fin body forms a second channel and so that the sidewall of the second fin body is oriented on a third crystal plane of provide a second carrier mobility that is different form the first carrier mobility," as recited in claim 1.

Re claim 1, Gambino et al. (US/6,689,650) disclose method of fabricating fin FET device having double gate and double channel regions using SOI layer. However, Gambino et al. do not disclose "forming a second transistor so that a sidewall of a second fin body forms a second channel and so that the sidewall of the second fin body is oriented on a third crystal plane of provide a second carrier mobility that is different form the first carrier mobility."

Nowak (US/6,610,576) also discloses method of forming a dual gate fin FET device using SOI layer. However, Nowak fails to disclose "forming a second transistor so that a sidewall of a second fin body forms a second channel and so that the sidewall of the second fin

Art Unit: 2823

body is oriented on a third crystal plane of provide a second carrier mobility that is different form the first carrier mobility.”

Therefore, both Gambino et al. and Nowak do not disclose “forming a second transistor so that a sidewall of a second fin body forms a second channel and so that the sidewall of the second fin body is oriented on a third crystal plane of provide a second carrier mobility that is different form the first carrier mobility” either taken alone or in combination.

Claims 2-6 also allowed as being dependent of the allowed independent base claim.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure Inaba et al. (US/6,525,403), Fried et al. (US/2003/0102518), Fried et al. (US/2003/0113970) and Fried et al. (US/2003/0102518) also disclose similar inventive subject matter. However, prior art of record does not anticipate or render obvious the claimed subject matter of the instant application as set forth above.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Correspondence


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brook Kebede whose telephone number is (571) 272-1862. The examiner can normally be reached on 8-5 Monday to Friday.

Art Unit: 2823

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on (571) 272-1855. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BK
July 21, 2004



George Fourson
Primary Examiner